Claims

What is claimed is:

1. A method of improving network database performance comprising the steps of:
   a) determining whether a first network packet involves a database transaction;
   b) intercepting the first network packet upon a positive determination in step a);
   c) determining the nature of the database transaction;
   d) selectively implementing a database acceleration technique based upon the determination in step c);
   e) creating a second network packet; and
   f) selectively masking at least one of the source and destination addresses of the second network packet based upon the determination in step c).

2. The method of claim 1 wherein step a) comprises the step of analyzing at least one of the packet's source and destination addresses.

3. The method of claim 2 wherein the source and destination addresses are Media Access Control addresses.

4. The method of claim 1 wherein step c) comprises the step of determining whether the transaction is a read transaction.

5. The method of claim 4 wherein step d) comprises the step of implementing cache coherency techniques upon a negative determination in step c).

6. The method of claim 4 wherein upon a positive determination in step c), step d) comprises the step of determining whether the content requested by the read transaction is locally available.

7. The method of claim 6 wherein upon determination that the content requested by the read transaction is locally available, step d) further comprises the step of fulfilling the read

request using locally available data.

8. A system for improving network database performance comprising:

a) a database server communicatively coupled to the network;

b) a client communicatively coupled to the network; and

c) a database accelerator communicatively coupled to the network comprising:

i) a packet interrogator for determining whether packets on the network are database transaction packets, determining the source and destination addresses of the packets, and determining the nature of the database transactions,

ii) a packet interceptor for intercepting database transaction packets, and

iii) a transaction accelerator for accelerating transactions between a database server and a client.

9. The system of claim 8 wherein the network is an Ethernet network.

10. The system of claim 8 further comprising storage communicatively coupled to the network for implementing caching techniques.

11. A system for improving network database performance comprising:

a) a means for determining whether a first network packet involves a database transaction;

b) a means for intercepting the first network packet upon a positive determination in step a);

c) a means for determining the nature of the database transaction;

d) a means for selectively implementing a database acceleration technique based upon the determination in step c);

e) a means for creating a second network packet; and

f) a means for selectively masking at least one of the source and destination addresses of the second network packet based upon the determination in step c).